December 4, 2008

TROUT UNLIMITED

By facsimile—(801) 539-4237

Selma Sierra
State Director. Utah BLM
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Fax 801-539-4237

Re: Protest of Utah BLM December Oil and Gas Lease Sale

Dear Director Sierra,

The Utah Council of Trout Unlimited[1] writes to formally protest certain oil and gas lease parcels scheduled for auction on December 19, 2008; specifically leases UT1108-35 through UT110842 and UT1108-47 through UT1108-50.

Introduction:

The above mentioned leases threaten over 30 years of federal, state, and private effort and investment to protect and restore populations of native Bonneville cutthroat trout (BCT) on the Deep Creek Range. Streams affected by these proposed leases form the core of BCT restoration efforts in the West Desert, including Birch and Trout Creek, which hold genetically pure remnant populations of native trout and have been used as source populations to restore other areas, Granite Creek, where native trout have been reintroduced, and a potential restoration area in Cottonwood Creek. Proposed lease parcels also adjoin private property containing brood stock ponds used in reintroduction efforts.

[1] Trout Unlimited (TU) represents 145,000 members nationwide and the Utah Council of TU is comprised of 8 Chapters and over 2,000 members throughout Utah. TU's mission is to conserve, protect and restore the coldwater fisheries and their watersheds.

These streams hold a particular significance for TU and our members. It was here in the 1970s that Don Duff, a former Council Chair of Utah Trout Unlimited and then a Forest Service biologist, "rediscovered" the Bonneville cutthroat trout in Utah, a specie that at the time was thought to be extinct in Utah.

Since then, the BLM, the Utah Division of Wildlife Resources, U.S. Forest Service, U.S. Fish & Wildlife Service, the Goshute Tribe, Trout Unlimited, and private landowners have worked in concert to preserve fragile populations of these native trout in the West Desert and expand their range in an effort to prevent their listing under the Endangered Species Act.

Statement of Reasons:

I.) Flawed Leasing Process:

Lease parcels 35-42 and 47-50 are in the planning area for the new EA, Oil and Gas Leasing in the Fillmore Field Office (Environmental Assessment UT-010-08-050) for which public comment is due on December 4th – the same day for which protest are due for the lease sale – yet these parcels are still being offered for sale in the December oil and gas lease sale. Without the finalization of the EA, it appears that these parcels would be offered based upon woefully outdated Oil and Gas Leasing Implementation Environmental Assessment from 1988.

The stated need of the new EA is *"Due to additional information acquired and changes in the human environment that have occurred since the completion of the current LUPs and their supplements, additional analysis of potential environmental consequences of leasing is needed."* (page 1, Purpose and Need) and that *"Tiering to this EA would allow the BLM to develop leasing proposals that concentrate on the issues relevant to a particular nominated lease. This EA will be used to determine the environmental protection measures that could be included as stipulations, lease notices, special conditions or restrictions on future leases as necessary to protect the resources within the FFO."*(page 1, Introduction)

If this new EA is needed to update an outdated land use plan so that leasing proposals can be developed with appropriate environmental protections, than it stands to reason that the current leasing proposal and leases to be offered on the December oil and gas lease sale have not been given the advantage of a proper environmental review and that leasing at this time is entirely premature. To reiterate, the stated purpose of the EA is guide the development of leasing proposals for the Fillmore Field Office because additional

analysis is needed. However, these leases constitute a leasing proposal that is that was developed before the completion of the EA, effectively predetermining the outcome of the EA. Clearly, this is a flawed process and Trout Unlimited believes that this constitutes a violation of the National Environmental Policy Act (NEPA).

The "fundamental objective" of NEPA is to ensure that a federal agency "will not act on incomplete information only to regret its decision after it is too late to correct." *Southern Utah Wilderness Alliance v. Norton*, 457 F. Supp.2d 1253, 1261 (D. Utah 2006) (quoting *Marsh v. Oregon Natural Resources* Council, 490 U.S. 360, 374 (1989)) (citation omitted). Therefore, "[i]f there remains a 'major federal action' to occur, and if ... new information is sufficient to show that the remaining action will 'affect the quality of the human environment' ... to a significant extent not already considered, a supplemental EIS must be prepared." *Id.* at 1264 (quoting *Marsh v. Oregon Natural Resources Council,* 490 U.S. 360, 371(1989)). Specifically, an "agency must be alert to new information that may alter the results of its original environmental analysis, and continue to take a 'hard look' at the environmental effects of [its] planned actions." *Friends of the Clearwater v. Dombeck*, 222 F.3d 552, 557 (9th Cir. 2000).

NEPA's implementing regulations further underscore an agency's duty to be alert to, and to fully analyze, potentially significant new information. "[I]f there are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts, a supplemental EIS must be prepared for an old EIS so that the agency has the best possible information to make any necessary substantive changes in its decisions regarding the proposal." Council on Environmental Quality, *NEPA's Forty Most Asked Questions*, available at <http://www.nepa.gov/nepa/regs/40/40p3.htm> (last visited Oct. 22, 2007) (citing 40 C.F.R. § 1502.9(c)).

By offering these leases n the December lease sale, it is Trout Unlimited's position that BLM is acting on incomplete information, without fully analyzing new information and circumstances, thereby failing to truly take a hard look at the impacts of the agencies planned actions.

II.) Significant New Information for Bonneville Cutthroat Trout

The proposed lease sale area along the Deep Creek mountain range in western Utah is of concern to Trout Unlimited due to the potential for adverse effects on conservation populations of genetically pure native Bonneville cutthroat trout. Bonneville cutthroat trout is a species of special management concern in all of the states where it is found. It currently occupies just 35% of its historic habitat with the greatest range constrictions

occurring in the lower elevations and southern extent.

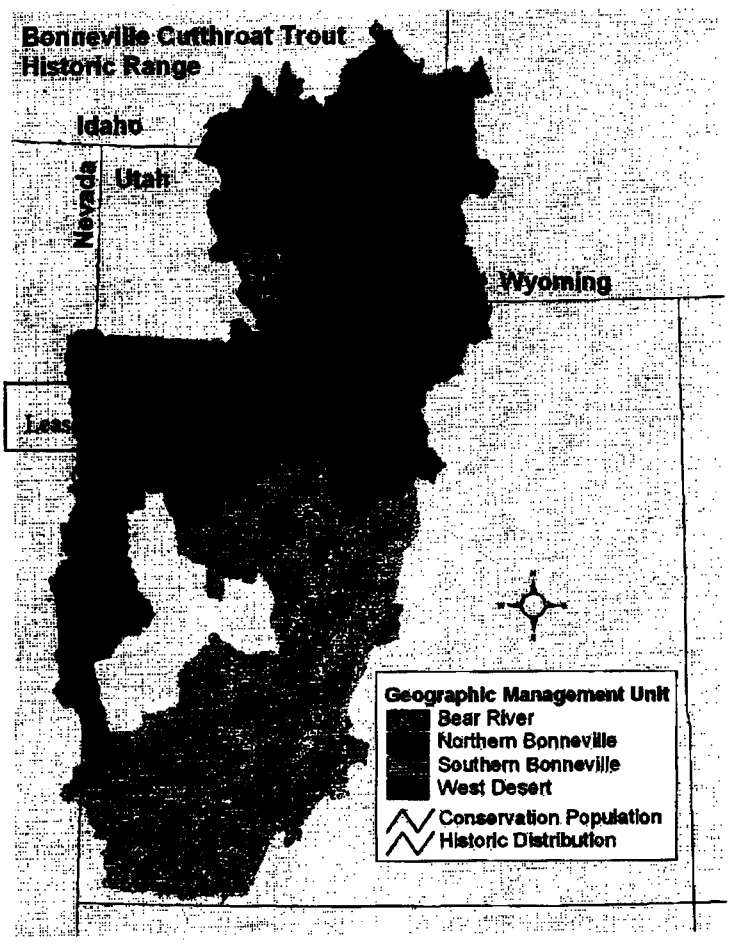

Figure 1. Distribution of Bonneville cutthroat trout.

Figure 1 shows the historic distribution as well as current conservation populations identified in the range-wide status assessment (May and Albeke, 2004). Management objectives for Bonneville cutthroat trout are organized by Geographic Management Units (GMU), also shown in Figure 1. The populations of concern with regard to the proposed lease sale are in the West Desert GMU.

As Figure 1 shows, the West Desert populations are disjunct, having no direct historic or current hydrologic connection to other populations within the range. These 'edge' populations, located at the margins of a species' range, are critically important to the long-term conservation of genetic diversity. In reviewing fossil records, Hampe and Petit (2005) found that populations at the constricting margins of a species' range (in this case low elevations and southern latitudes) are disproportionately important to the survival and evolution of the species since they commonly contain the bulk of the species' genetic diversity. This is a particularly important consideration when placed in the context of global warming induced environmental change since these populations may have unique adaptations that have allowed them to survive and evolve at the margins of suitable habitat. Figures 2 and 3 illustrate the challenging environmental conditions that have shaped the genetic diversity of the populations in the West Desert.

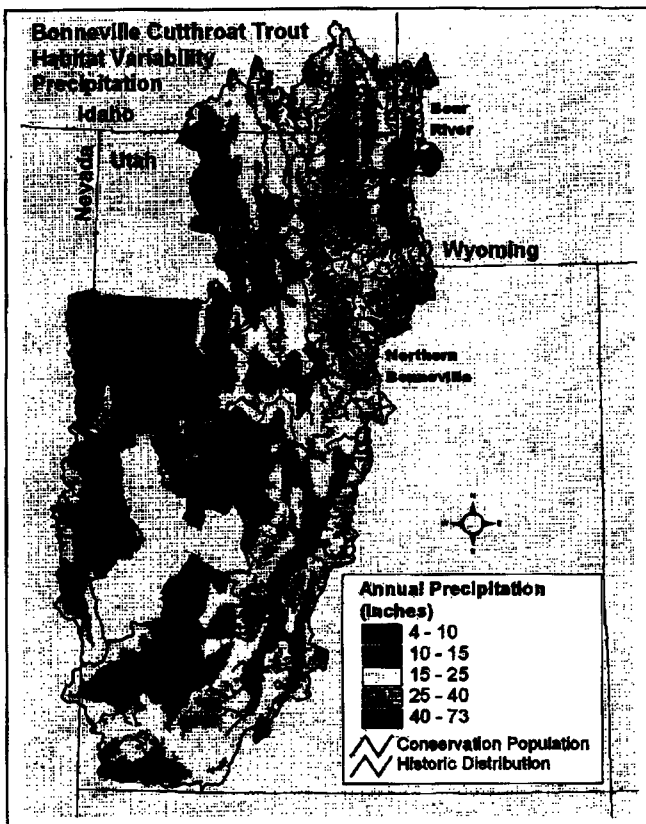

Figure 2 Mean annual precipitation, 1970-2000.

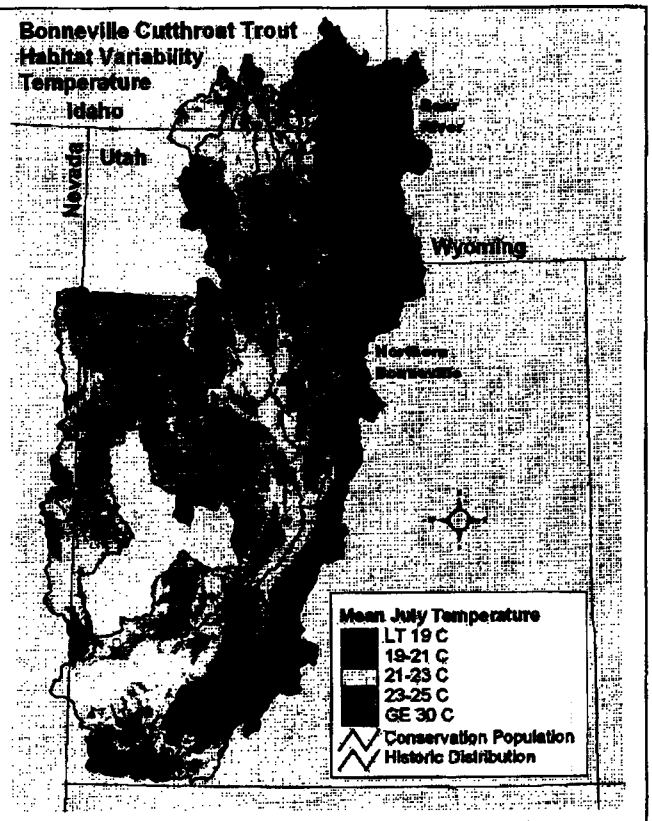

Figure 3. Mean July air temperature, 1970-2000.

Figure 2 shows the mean annual precipitation from 1970-2000. Values associated with the historic distribution range from 6 inches in the West Desert to 66 inches in the Uinta Mountains at the northeast portion of the range. The historic distribution of West Desert populations extended down from the cooler Deep Creek Mountains to the lower elevations where average summer temperatures were up to 24°C (Figure 3). These warm, arid conditions likely resulted in stream temperatures significantly warmer than found in other portions of the range and thus required unique local adaptations to survive.

Trout are particularly vulnerable to environmental change brought on by global warming due to their dependence on cold, clean water. Trout Unlimited has analyzed four climate change impacts assuming a 3°C temperature increase by mid-century: winter flooding, wildfire, summer temperatures, and drought. Of these four, drought and summer temperature pose the greatest threat to the populations of the West Desert. According to work done by Martin Hoerling (2007)[2] at NOAA the southwest is entering a 'new drought era' in which a 'near perpetual state of drought will materialize in the coming

[2] Hoerling, M. 2007. Past peak water in the southwest. Southwest Hydrology Jan/Feb:18.

decades as a consequence of increasing temperature'. Figures 4 and 5 show the results of our analysis for these two factors. The majority of the historic range for Bonneville cutthroat trout is at high risk for drought while the lower elevations and warmer regions such as the West Desert are also at high risk for unsuitable summer temperatures. Significant portions of the historic range and current habitat will likely develop conditions that are similar to or worse than those currently existing in the West Desert while conditions in the West Desert can be expected to become more extreme.

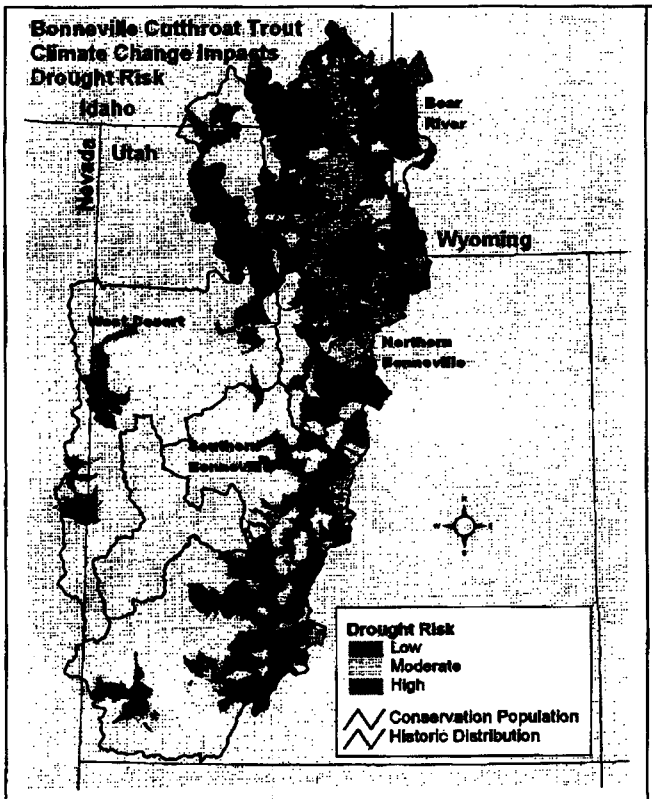

Figure 4. Drought risk due to climate change.

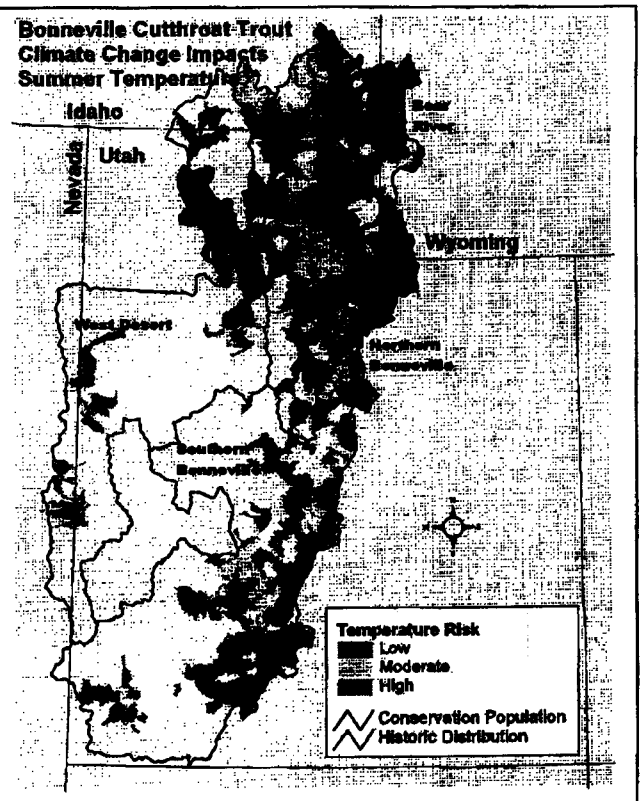

Figure 5. Summer temperature risk due to climate change.

Trout are very resilient and have adapted to many fluctuations in climate and environmental conditions over their evolutionary history. In order to help them survive climate change and continue to adapt and evolve to new circumstances, Trout Unlimited advocates the reduction of non-climate habitat stressors through the protection, reconnection, and restoration of important habitat areas and populations (Williams et al, 2007)[3]. While the populations in the West Desert currently occupy high quality habitat,

[3] Williams, J.E., Haak, A.L., Gillespie, N.G., Neville, H.M., and W.T. Colyer. 2007. Healing troubled waters: Preparing trout and salmon habitat for a changing climate. Trout Unlimited, Arlington, VA.

their isolation and fragmentation present other challenges to their survival.

As Figure 6 illustrates, there are three populations of Bonneville cutthroat trout in the West Desert GMU that may be directly affected by the proposed energy development. All three of them are genetically pure and, as previously discussed, likely contain unique genetic adaptations that could be important to the survival of the subspecies in a changing climate. They are all at high risk for drought and increased summer temperatures that could result in local extirpations. In order to help these populations survive, it is important that they have access to high quality habitat capable of supporting an 'effective population' of at least 500 adults which may require a total adult population of 1,000 – 2,000. This is considered to be the minimum population size necessary to maintain genetic diversity and reduce extinction risk due to demographic collapse or stochastic events (Hilderbrand and Kershner, 2000).

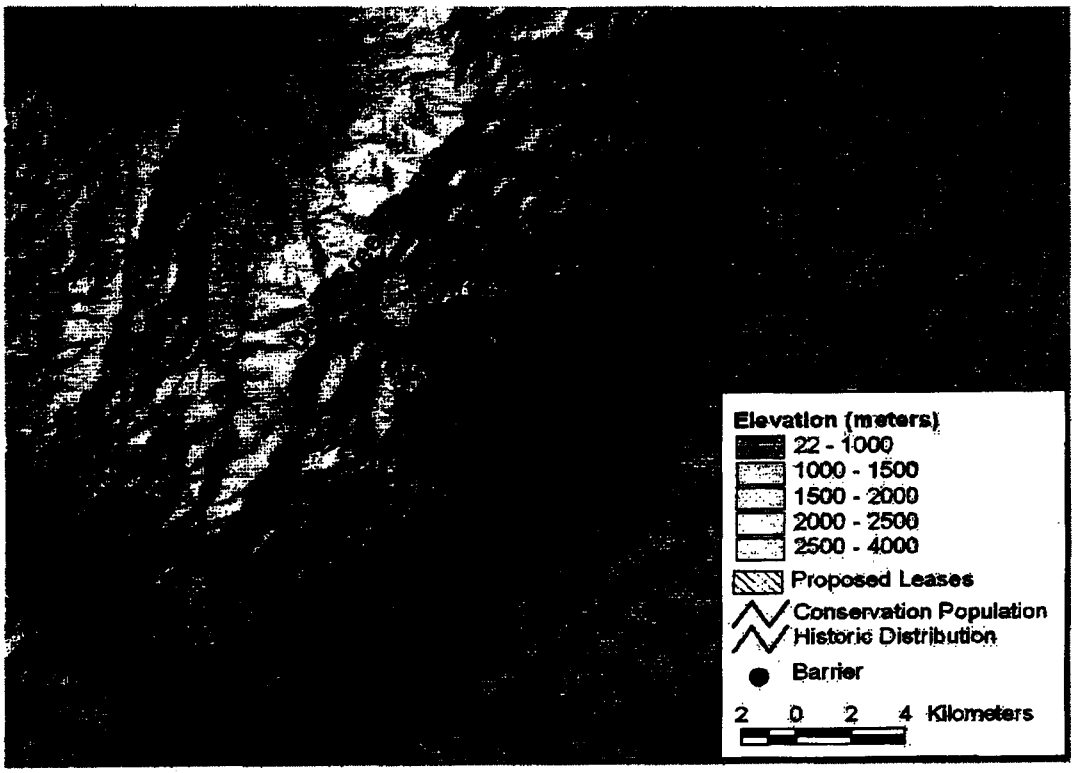

Figure 6. Conservation populations impacted by proposed lease sales.

Trout Unlimited has conducted an analysis of population persistence for Bonneville cutthroat trout based on criteria established by Hilderbrand and Kershner (2000)[4] for

[4] Hilderbrand, R.H. and J.L. Kershner. 2000. Conserving inland cutthroat trout in small streams: How much stream is enough? North American Journal of Fisheries Management 20:513-520.

inland cutthroat trout in small mountain streams. These criteria, related to population density and occupied habitat, are appropriate for evaluating the likelihood of long-term persistence of the West Desert populations under current conditions.

Hilderbrand and Kershner (2000) found that 9.3 km of occupied habitat was the minimum required, at any population density, for persistence. Therefore, the populations in Trout Creek and Granite Creek do not meet the minimum persistence threshold for habitat extent. Their isolation above a barrier has protected the genetic purity of these populations but may ultimately result in their extirpation. Degradation of historically occupied habitat downstream of the barriers may preclude future opportunities to extend these populations downstream in order to increase the likelihood of their continued persistence. The Birch Creek population, with 10.43 km of occupied habitat and a population density of 400 fish/mile, just meets the minimum threshold for persistence and is thus a high priority for protection. All of these populations are at high risk from climate change impacts and therefore every effort should be made to minimize additional habitat stressors while expanding occupied habitat.

Bonneville cutthroat trout are a BLM Sensitive Species and as such, it needs to be considered in management actions to ensure that BLM approved actions do not contribute to the need for the specie to be listed in the future. The populations of Bonneville cutthroat trout that are left in the Deep Creek Range exist in small occupied reaches of streams. As noted in a 2001 Status Review by the U.S. Fish & Wildlife Service (USFWS), the fish remain in isolated creeks, where a single flood, fire, or pollution event can wipe out an entire population and where no other connected population can recolonize the stream. We note that the USFWS has relied repeatedly on Deep Creek conservation and restoration efforts in determining not to list Bonneville cutthroat trout, a calculus that could change if these critical populations are threatened.

As the BLM itself noted in an April 4, 2008, letter to the USFWS:

> *"The BLM in Utah is a signatory to the [2000] Range-Wide Conservation Agreement and Strategy for Bonneville Cutthroat Trout as well as the recently updated [2008] Conservation Agreement for Bonneville Cutthroat Trout in the State of Utah. The BLM is committed to the conservation of Bonneville cutthroat trout and has stated its intent and commitment to further conservation of this native trout through signing these conservation agreements and strategies."*

A review of the leases reveals that there are no stipulations for the protection of Bonneville cutthroat trout occupied or restoration habitat, only Lease Notices, none of which are specific to Bonneville cutthroat trout. The effectiveness of these lease notices has not been analyzed in any NEPA document to ensure that there would not be deleterious impacts to Bonneville Cutthroat trout. Furthermore, these Lease Notices are waivable and amendable without NEPA documentation, providing little certainty for these rare and sensitive populations of Bonneville cutthroat trout. Lastly, it is important to be clear that not only is currently occupied habitat important to protect, but so too is historic habitat with restoration potential. Without expanded occupied habitat, the majority of these populations do not meet their persistence threshold and are likely to ultimately be extirpated from existing occupied stream reaches. Therefore, protection and mitigation measures for both occupied habitat and historic habitat with restoration potential need to be developed and analyzed in a thorough environmental review.

Climate change, persistence thresholds, drought, and the need for expanded occupied habitat have not been analyzed in any NEPA document analyzing the environmental impacts that the sale of these lease parcels would pose to Bonneville cutthroat trout, the future restoration work benefiting Bonneville cutthroat trout, and other resources in the area. Before leasing these contested leases, these factors, combined with the impacts of oil and gas development, need to be analyzed in a cumulative effects analysis and effective protection and mitigation measures need to be included if it is determined that these lands are appropriate for leasing.

III.) Inaccurate Reasonable Foreseeable Development Scenario

Whether or not these contested leases are offered based upon the 1988 Oil and Gas Leasing Implementation EA or the one currently being performed, the Reasonable Foreseeable Development Scenario (RFD) is one in the same and needs to be updated. The RFD assumes the level of oil and gas activities and associated disturbances that the BLM expects, and as such serves as the basis of analyzing impacts under NEPA. Therefore, if the RFD is flawed, then so too is the agencies analysis and disclosure of the impacts from proposed activities.

Both the 1988 oil and gas leasing implementation EA and the new one being performed rely upon the RFD used for the 1988 Oil and Gas Leasing Implementation EA. In reviewing the 1988 Horse Range Resource Area Oil and Gas Leasing Implementation EA, this RFD appears to be on page two, under the title "Development Scenario for Exploration and Development" The entire RFD is one paragraph, about 150 words.

Because it is the RFD that serves as the very basis that environmental impacts are analyzed under, Trout Unlimited objects to such little analysis, in addition to the fact that this RFD is twenty years old. In twenty years, much has changed that affects where and how the oil and gas industry drills for oil and gas and what resources are now profitable to extract. Technological developments have made extraction of natural gas economical in geologic formations that were not developable in 1988; in 2004 a large discovery of oil in the Covenant Field renewed interest in oil and gas exploration in Utah's Overthrust, including part of the area covered by the Fillmore Field Office; the price of oil and natural gas has made previously uneconomical reserves of hydrocarbons worth extracting; and social and political demands for domestically produced oil and gas have prioritized drilling on public lands. Basing the environmental analysis that these leases are being offered under on information and one paragraph from 1988 is shortsighted and the BLM should perform a new RFD to ensure that the agency and the public know an accurate level of development to expect, as well as an accurate representation of the impacts that that development will pose.

IV) No Need or Obligation to Lease at this Time

Due to a lack of proper environmental review, and a lack of stipulations to protect not only existing Bonneville cutthroat trout habitat, but habitat that has the potential for restoration that would foster the necessary expansion of the specie's occupied habitat within the West Desert GMU, Trout Unlimited maintains that the leasing of these parcels at this time is unwarranted.

Upon completion of the new EA, we believe that a full EIS will be necessary to address an updated RFD as well as the environmental concerns specific the Deep Creek Range and the unique resources found here. Indeed, the introduction of the EA states that "*This EA is an analysis of impacts on the quality of the environment and serves as a vehicle for interdisciplinary review of the proposal and, if necessary, will be used to facilitate the preparation of an environmental impact statement (EIS)*" (page 1, Introduction) Our determination that a full EIS will be necessary stems from the fact that the EA goes into little detail about the significance and status of the resources found in the planning area, in particular, Bonneville cutthroat trout.

Additionally, the cumulative impacts portion of the EA is incomplete. Recent drought has reduced stream flows and reduced occupied habitat. In addition, the prospect of ground water pumping by the Southern Nevada Water Authority is a cumulative impact to the streams and cutthroat populations in the region that the BLM has not evaluated. The combined impacts of drought, ground water depletion, and the impacts from oil and gas

development could serve to extirpate these cherished populations of native trout from the West Desert. Upon review of the EA, it is clear that the status of Bonneville cutthroat trout in the Deep Creek Range have not been discussed in detail, nor have current and future restorations efforts. Likewise the impacts to this specie and restoration efforts have not been fully disclosed.

TU feels that it is unreasonable to offer these lands for lease when two decades have elapsed from the time the initial decision to allow the lands in question to be leased was made in 1988 and today, when a much-need environmental analysis has yet to be completed. For all of these reasons, we believe that the best course of action for the BLM to take is to defer the contested leases from the upcoming December lease sale, finish the EA, perform an EIS, and only then reconsider leasing these lands if an EIS determines that these lands are appropriate for leasing and that there are adequate protections for trout and wildlife in place.

An instruction memo from the Director of the BLM seems to agree, stating that:

"All SOs are to consider temporarily deferring oil, gas and geothermal leasing on federal lands with land use plans that are currently being revised or amended. A decision temporarily to defer could include lands that are designated in the preferred alternative of draft or final RMP revisions or amendments as: 1) lands closed to leasing; 2) lands open to leasing under no surface occupancy; 3) lands open to leasing under seasonal or other constraints with an emphasis on wildlife concerns; or 4) other potentially restricted lands." (Instruction Memorandum No. 2004- 110 Change 1)

Clearly, due to trout and wildlife resource concerns that have the potential to restrict drilling on BLM lands on the contested leases, the BLM is under no obligation to lease these lands at this time. By deferring the contested parcels, BLM can ensure that a thorough land use planning process with meaningful public involvement will be fully undertaken.

V.) Conclusion

In closing, Trout Unlimited hopes that Utah BLM will defer lease parcels leases UT1108-35 through UT110842 and UT1108-47 through UT1108-50. Leasing at this time without a full environmental review and proper protections in place would threaten crucial populations of native trout and compromise restoration efforts. Thank you for the consideration of our concerns.

Sincerely,

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